

Volume 17 No. 5

May, 1966

# ATTENTION ALL REGISTERED MONTANA PILOTS!

The Montana Pilots' Flight Plan Service Is For You! File/Close Your Flight Plan By Collect Call—Free!

When taking off from, or landing at, an airport within the State of Montana that does not have a FAA Flight Service Station—place a collect call to your nearest FSS and state, "This is a Collect Call—Montana Pilot Flight Plan."

GIVE THE FSS COMMUNICATOR Your Current Montana Registration Number and your name—then File or Close your Plan.

(Please avoid calling at 15 or 45 minutes after the hour during the weather broadcasts.)

**REMEMBER**—The Flight Plan Service is a "Use It or Lose It Service.

ALWAYS FILE A FLIGHT PLAN

—BE SURE TO CLOSE IT—

USE YOUR MONTANA

FLIGHT PLAN SERVICE

# MAMA ELECTS RUBEN COY, PRESIDENT AT ANNUAL MEETING

by J. MONGER

The Northern Hotel in Billings was the location for the 8th Annual Meeting of the Montana Airport Management Association on April 15. The meeting was called to order at 9 A.M. and President Ed Swetish of Dillon introduced the host airport manager from Billings, Mr. Robert Michael. Mr. Michael introduced the Honorable Willard E. Fraser, Mayor of Billings who welcomed the group to the city. The meeting primarily consisted of panel discussions followed by question and answer periods. The mutual exchange of ideas, problems and methods again highlighted the meeting.

The first panel discussed Approach Path Protection and Airport Zoning. Participants were: Mr. Robert Ryan, City Attorney, Billings; Mr. Paul Vick, County Surveyor, Missoula and Mr. Robert Michael.

The second panel consisted of a discussion on City, County, State and Federal airport financing. Mr. Will Fry, City Clerk, City of Billings; Mr. James Monger, Assistant Director, Aeronautics Commission, Helena and Mr. Wesley R. Pearson, Assistant Chief, Airports Branch FAA, Minneapolis, were the participants.



The Honorable Willard E. Fraser, Mayor of Billings, and out-going President and new Director, Ed Swetish of Dillon.

The luncheon speaker featured was Mr. Vern Carlson of Frontier Airlines from Denver. Carlson spoke on airline matters as they concern airports.

The first panel in the afternoon session consisted of a discussion on airport exclusives. Participants were Mr. Charles Lynch, Director, Aeronautics Commission; Mr. H. "Pete" Hill, Airport Manager, Idaho Falls; Mr. James Pickens of Combs-Pickens in Billings.

The final panel discussion consisted of demonstrations, movies and discussion on crash and rescue

(Continued on Page 9, Col. 1)

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MONTANA AERONAUTICS
COMMISSION

Box 1698 Helena, Montana

Tim Babcock, Governor

Charles A. Lynch, Director

Walter Hope, Chairman Carl W. (Bill) Bell, Vice Chairman Jack R. Hughes Secretary E. B. Cogswell, Member Clarence Anthony, Member Gordon Hickman, Member Peter H. Black, Member



### **DIRECTOR'S COLUMN**



Charles A. Lynch

## "A DAY WITH ADC"

It is seldom in the life of one in a civil capacity to enjoy the rare opportunity of a thorough briefing and demonstration of the inner operations of the U.S. Air Defense Command.

At the gracious invitation of Colonel Leon G. Lewis, Commander of the 28th NORAD Air Division (ADC), I was afforded that opportunity on Wednesday, April 20, 1966 at Division Headquarters, Malmstrom Air Force Base, Great Falls. This I assure you is a sober and thought provoking experience.

Leading off with an inspection and briefing of the Command Post at the Sage Center by Colonel Reet P. Smith, Deputy Commander of the 28th Air Division, aided by Lt. M. D. Cummings of the Division Directorate of Information, we proceeded to the weapons room, the power generator rooms, air conditioning center, computer installation and data processing areas. This gives one a real insight into the enormous scope and the magnanimity of responsibility to those in command to acuate our defense efforts in the event such an action becomes necessary at anytime,



Col. Reet P. Smith, Deputy Commander of 28th Air Division, briefs Director Lynch on the operation of the Radar Console Panel in combat headquarters.

now, tomorrow or ten years from now.

Obviously a defense system, designed to the needs of a nation whose philosophy is **never** to be the aggressor but to stand prepared to retaliate instantly to obvious acts of war by a foreign aggressor, must be operational and alert at all times and continuously, though all concerned hope and pray that the actual and intentional need for all out mission will never come.

It then becomes quite clear that to affect this necessary preparedness, a condition of continuous training, continuous practice, under accurately simulated conditions, must exist on an ever repeating year round basis, not for just the pilots, the officers in command, or the front line men visible to the general public, but also the electricians, engineers, maintenance men, mechanics, machinists, even including the secretaries, accountants, cooks, and plant maintenance personnel.

Only through such a training, retraining, maintenance and exercise program can the people of this nation know that we as a total nation, military and civilians together, will be "ready to go" in 1966, 1975 or any other futuristic date in the coming history of our country.

Following lunch with Col. Rex Dowtin, Commander of the 341st Missile Wing SAC, at the new officers club, recently completed on the Base, I was turned over to Col. G. M. Howell, Commander of the 29th Fighter Interceptor Squadron, for what could not help but be the

highlight of the very delightful day at Malmstrom.

For a man who learned to fly in a Taylorcraft 26 years ago, a ride (I prefer to class it as a "blastoff") in the F 101 B McDonald Voo Doo is an Eye Opener. I knew some F model aricraft weighed over 25 tons, but you can feel it in taxiing across a concrete ramp. I was well aware of the action of an after-burner, but 2 of them simultaneously is something else—I was aware before of 30° climb angles, but to accelerate by 300% during such a climb angle just doesn't fit civil flying. 35,000 in 3 minutes in a "gentle climb" (as Capt. P. H. Springer put it) again exposes more eye ball. The highlight of course is that supersonic spurt—"What a way to go!" I dare say, if one could fly supersonic everywhere at all times, he would never get enough of it. On returning to sub sonic again, you are impressed that after all, you are still an earthling.

To observe a hook up of your fighter by "Data Link" to the big computer back at the base wherein the fighter on auto pilot is vectored at a given altitude and speed to a precalculated rendezvous with a distant enemy moving target and then fired is probably the final Eye Opener.

Capt. Springer and hundreds like him around our nation carry out these mission assignments as a matter of routine—a job to do—precise, accurate, and fast. They have a heavy responsibility, are in charge of an enormous national investment,

and an assignment of the protection of our existance. Springer is a real pro, a career officer and in my humble opinion probably far better than average. Maybe that statement is normal from me because he was "my" pilot. It is often a normal "student" reaction to admire most his first instructor. I do, both civil and military, and for this reason I certainly feel our total defense is only complete as long as we keep our "missile riding men" and our "manned missiles."

### A CASE IN POINT

By CHARLES A. SMITH Commission Attorney

"Damages to bailed aircraft-Negligence vs. Exercise of Ordinary Care.

Plaintiff brought this action to recover damages for injuries to an airplane which he had rented to defendant. The defense was made that defendant was guilty to no negligence which caused injuries to the airplane in question. The trial judge, without jury, entered judgment for plaintiff in the sum of \$1500. De-

fendant appealed.

The general rules relating to bailments also apply to airplanes. A bailee of an airplane for hire owes the owner the duty of ordinary care in protecting and keeping the air-plane safely. The bailor makes out a prima facie case against the bailee when he shows the property was in good condition. Bailee must then show ordinary care on his part in the handling of the property to defeat bailor's suit for damages.

The airplane in question was rented to be used by defendant in visiting its manufacturing plants in different states. Plaintiff delivered the plane to defendant in good condition to be used for this purpose. The defendant was an experienced pilot, having flown as pilot, about 6000 hours. Defendant owned a plane which was the same type as the rented plane in question.

The plane had been recently inspected and pronounced in a condition" by the mechanics of the Plaintiff. There were three gasoline tanks on the plane. The gasoline could be supplied to the motor from either of these tanks for the use of fuel selector valve. The defendant testified he started flying with the gasoline being supplied from the left tank. The tanks held about 20

gallons of gasoline each. After he had flown "something short of two hours" he noticed his left tank was "one quarter full;" so he changed over to the right tank. He made this change in the normal regular manner and kept flying for about 30 minutes. He went through some heavy rains; and immediately thereafter the engine quit. At that time the defendant had flown the plane two hours and 24 minutes. He used every device on the plane to start the engine again, switching to each of the three gasoline tanks. The right tank was 3/4 full of gasoline at this time. The engine would not start, so defendant made a forced landing, and the plane was injured.

A witness for defendant testified he examined the plane after the crash on a later day but before it was moved. At that time the left tank was empty and the right tank was "brim full." This examination of the gasoline tanks was made by visual inspection, not by measurement. The witness stated the plane was not level when he was examining it, but was "listing" to the left, which would make the right tank appear full when it was not. After some repairs, the plane was flown out. The witness found nothing wrong with the gasoline tanks or the fuel supply system.

Engine failure could have been caused by:

"A failure in the ignition systems; any failure of the fuel system which would include the fuel pump on the line going to the carburetor including the detraction control, would cause the engine to fail.

Q. "What about the air in the line, gas line?"

A. "It would cause a failure."

The normal consumption of gasoline for this plane while in operation was 9 or 10 gallons an hour. From the time the engine failed until the forced landing was made was "full 2 minutes." Just before the crash, the left tank was 1/4 full of gasoline and the right tank was 3/4 full of gasoline.

For the defendant the court had the positive testimony of an expert pilot that the engine just quit. He used all facilities available to get it started again, but he could not get it started. Several possible causes for the engine failure were mentioned.

The Plaintiff relied upon certain

physical facts and circumstances to which his witnesses testified to outweigh the foregoing positive testimony of defendant; the left tank of the engine was completely empty; the right tank was "brim full." There was nothing wrong with the gasoline line when the plane was inspected the next day after the crash.

In view of the foregoing, the Appellate Court concluded that the preponderance of the evidence sustained the contention of the defendant; this is, that defendant was not negligent in the handling of this plane, but it was flown by defendant in the exercise of ordinary care. The court said that it seemed altogether unreasonable to them that the defendant, an excellent pilot, would have crash landed for lack of gasoline when he could have easily switched to another tank. The court concluded that it seemed more reasonable that something went wrong with the mechanism of the engine and it just quit.

Having this view, the judgment of the trial court was reversed and the plaintiff's suit was dismissed.

## OHIO STATE TO HOLD SPECIAL FI REFRESHER COURSE

A special three day course to be held June 14, 15, and 16 at the Ohio State University will be sponsored by the National Aviation Trades Association, the AOPA Foundation, Inc. and the Link Foundation in cooperation with the Federal Aviation Agency.

With the new regulation that all certified flight instructors must undergo biennial requalification, the sponsors combined their efforts to sponsor the flight instructor refresher course which will be accepted as meeting the requalification regulation in lieu of a flight check.

The course will be held on the campus of the Ohio State University -100 applicants will be accepted and the registration fee will be \$35.00, which cost includes all text material relative to the course.

FOR SALE: SPRAYERS: 2 Twin Beech sprayers. Price: \$3,500 each or both for \$6,000. One Lockheed PV-2 sprayer. Price: \$16,000. Contact Tom Herrod, Logan Field, Billings. Phone 259-6152.

FOR SALE: 1957 Piper PA-18 150—New periodic.—Price: \$4,000. Contact: Tom Herrod, Logan Field, Billings. Phone 259-6152.

FOR SALE: 1959 Comanche 259-6152.

FOR SALE: 1959 Comanche 259-Autoflite—50 hrs. since T.O.H.—dual crystal omni—ADF—Mark Beacon Receiver—recent paint—very clean. Will trade. Price \$11,500. Contact: Byron Bayers, Twin Bridges, Mont.

### AIRPORT NOTES



by James H. Monger Assistant Director, Airports

scobey. The Daniels County Airport Commission received approval from the Montana Aeronautics Commission on April 13 for a \$21,000 ten year non interest loan. This loan will be used to finance a local, state project, which will consist of overlaying the existing runway at Scobey with 1½ inch of asphalt. This project is expected to be completed early this summer. Plans and specifications can be obtained from the Daniels County Airport Commission at Scobey. All interested contractors are urged to bid on this project.

SHERWOOD AIRPORT. The Joint City County Airport Board at Plentywood is planning extensive modifications this summer for the Sherwood Airport, which serves the City of Plentywood and Sheridan County. The airport board recently got approval from the Aeronautics Commission for a loan of \$14,700. This loan will be used to aid in the financing of a local, state and federal project which will consist of resurfacing the paved runway and apron. The Sherwood Airport Board has also made an application for a preliminary engineering grant in the amount of \$1,000. This grant will be used to help finance an engineering study which will be for the consideration of extending the taxiway from the T Hangars to the end of runway 12. It is planned that the ultimate construction of this access taxiway from the runway to the T Hangars will be a local, state and federal project. The Sherwood Airport Commission received approval for a \$10,000 Aeronautics Commission loan to assist in the financing of the taxiway project.

MILES CITY. The Miles City Airport Commission opened bids on April 5 for the reconstruction of their central taxiway. This project is a local, state and federal aid project.

The Montana Aeronautics Commission loaned the Miles City Airport Commission \$12,000 to match the Federal funds. The apparent low bidder on this project was Lou Richardson Company of Miles City with a total bid of \$22,933.62. The only other bidder was Gus Albert Construction Company of Miles City with a total bid of \$33,031.50.

YELLOWSTONE AIRPORT. There is still about one foot of high moisture content snow standing on the airport at West Yellowstone. We anticipate that this airport will be free of snow by May 15. Please check Flight Service Station NOTAMS for the date that the airport is declared usable for the year. Aviation services will probably be available at the Yellowstone Airport the last week in May.

BROADUS. The Stephen Kenney Construction Company of Hardin has again commenced work for this season on the new general aviation utility airport at Broadus. The project had been shut down last fall due to inclement weather, it is expected that this new airport will be completed in the latter part of May.

BOZEMAN UTILITY STRIP. The Edsall Construction Company of Bozeman has a lease on a piece of property south of Montana State University. Recently a group of individuals from around Bozeman have developed this property into a utility airstrip. They report that the airstrip is privately owned but open for public use. The turf runway is 50 feet wide and 2640 feet long. The approaches are good on both ends and there is a tie-down area on the northwest edge of the strip, along the side of a windcone. They report that a pay telephone booth will be installed yet this spring, so that transportation can be secured from either the University or downtown. The strip location is by a paved road and is located approximately one mile southeast of the field house at MSU.

T HANGARS. The Engineering Department of the Montana Aeronautics Commission has developed a typical set of "off the shelf" T Hangar specifications. A local airport board can now obtain a set of these specifications directly from our office and attach to the spec's, a copy of the plans that would show the special conditions concerning any one airport and their particular T Hangar needs. Lewistown is the first loca-

tion to utilize these specifications.

SCHAFER AIRSTRIP. Plans are now being finalized for the dedication of the Pilots' Campground at the Schafer airstrip. This airstrip is located on the north edge of the Bob Marshall Wilderness Area and south of Glacier National Park along the middle fork of the Flathead River. Last summer the Montana Association, the Montana Aeronautics Commission and the United States Forest Service joined efforts and developed a pilots' campground costing a total of \$3,000. The dedication will be held on Sunday, June 26 and the flying public is invited to attend and bring their own food and other facilities if they are planning on staying overnight. Watch for more details in the June Newsletter concerning the Schafer

Campground Dedication.

PORCUPINE STRIP. The Montana Aeronautics Commission has recognized the need for an airstrip at Gallatin Canyon mid distance between Bozeman and West Yellowstone. Several years ago it was determined that an airstrip would be desirable for the purpose of recreation, emergency, fire control, commercial purposes and governmental use. The location that looked most desirable was in the wide valley where Porcupine Creek enters the Gallatin River. The State Fish and Game Commission owns an elk game ranch at Porcupine Creek. The Montana Aeronautics Commission felt that it would be advantageous to locate the airstrip on property owned by a State agency. A request was made by the MAC to the Fish and Game Commission to consider allowing this department to utilize just enough property to develop this airport for general aviation. On April 18 the Fish and Game Commission briefly discussed the matter and rejected the Aeronautics Commission proposal stating that the small strip of land between the river and the highway was necessary for elk range. The airport division is further pursuing the matter and it appears that adjacent property under different ownership will be considered for the same type of airstrip development that was originally planned.

WANTED TO BUY: A good used 172—prefer a 1956 to 1962 model. Contact: Royce Nelson, Broadwater Trailer Court, Helena. Phone 442-

1502.
WANTED TO RENT: Comanche or Apachd
(or equal) for 2 weeks in May. Contact: Ernie
Massman, Box 580, Columbia Falls.

# SEARCH AND RESCUE CONFERENCE HELD

JACK WILSON Safety and Education Officer

A Search and Rescue coordinators conference was held in the Montana Aeronautics Commission Conference room on the Helena Airport. Thirteen Search and Rescue Districts had representatives at the conference. While reviewing the S & R responsibilities, administration, and procedures; the forms for fuel, oil, telephone calls and the telephone numbers of contacts at the various airports and facilities were brought up-to-date. As the Search and Rescue Coordinators are directly concerned with the State and Regional Defense Airlift and will be performing similar duties under this function, a complete briefing of the State and Regional Airlift (SARDA) was conducted by Mr. Lynch. In order to accomplish the necessary planning in the event of a National and/ or State emergency wherein there would be a need for the SARDA fleet, it becomes imperative that each district, area and state coordinator, be aware of the aircraft and pilots available. It is, extremely important that each aircraft owner furnish the necessary information on the State and Regional Defense Airlift registration form which has been sent or will be sent to him.

We urge each and every aircraft owner in Montana to fill in the necessary information on the SARDA Fleet registration card and return it to the Montana Aeronautics Commission, Box 1698, Helena, Montana, as soon as possible.

# FEDERAL AVIATION AGENCY ITINERARY LISTING



Airport Bozeman (Gallatin Field)	May 19	June
Culbertson		8
Glasgow	18	
Great Falls (International)	5	9
Miles City (Municipal)	26	
Missoula	26	23
Sidney	25	

Note: Provisions have been made to give private pilot written examinations ON AN AP-POINTMENT BASIS ONLY at the following FAA Flight Service Stations:

Bozeman	Lewistow
Butte	Livingsto
Cut Bank	Miles Ci
Dillon	Missoula

### **NEWS FROM WESTERN**

### APRIL—40 YEARS FOR WAL JUNE—WEST YELLOWSTONE SERVICE RESUMES

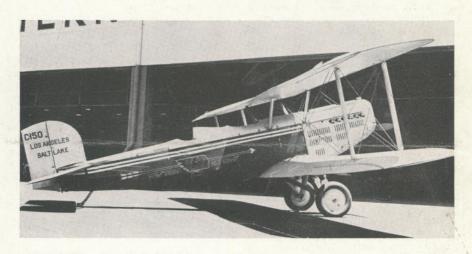
Western Air Lines celebrated its 40th Birthday on April 17th. Western, sole survivor of the Helmet and goggles pioneers that carried the U.S. Mail back in 1926, was incorporated on July 13, 1925.

On May 23, 1926, Western, using a Douglas M-2, carried its first passenger sitting on a mail sack with the wind in his face. The M-2 carried pilot plus one or two passengers —a sharp contrast to the 94 passengers plus five crew members on the modern day \$2,100,000 Electra used by Western on the scheduled service into Montana's West Yellowstone airport.

Western's progress, from a fleet of six M-2 biplanes in 1927 to the current fleet of four DC-6B, twelve Electra 11's and twenty 720 B1s with Sixteen of the Boeing 737-200 Twin Jets now being developed, denotes their success and their constant eye to "passenger service." Another clue to this success is their "Best On-Time Record" for the industry during all of last year.

### SERVICE RESUMES INTO WEST

Word has been received from Mr. John W. Simpson, Law Department Director, for Western Airlines that the Civil Aeronautics Board was notified on April 19th that regular scheduled service, suspended during the winter months, into West Yellowstone Airport will resume on June 9, 1966.



WAL's Douglas M-2 (Cruising speed 115 mph. Engine, one - 415 hp.)



WAL's Electra (Cruising speed 400 mph. Engine, Four prop jets - 3,750 hp. each.)

# MAC NEW STAFF MEMBERS

### DAVID KNEEDLER-AIRPORT DIVISION

David C. Kneedler started work with the Aeronautics Commission on April 25th in the Engineering Department of the Airport Division. David, hired by the Commission as an engineering aide, was formerly employed as an engineer with the Highway Department in the Traffic Engineering Department.



David Kneedler

Dave, a Helena native, graduated from Helena High School and attended College at Montana State University, Bozeman and Carroll College in Helena. Dave majored in Civil Engineering with a minor in music. His favorite hobby is skiing and is the present President of the Belmont Ski Association in Helena.

Dave will be assisting airport engineers Worthie Rauscher and Vern Moody in airport work throughout the state. It is expected that his primary job this summer will be on the airway beacon relocation program. His regular duties will include drafting, surveying, airport maintenance and airport inspection.

Dave, his wife Rosanne, and their four children reside at 705 Rhode Island Avenue in Helena.

### DOROTHY M. CORDIAL-SAFETY AND EDUCATION DIVISION

Dorothy joined the Montana Aeronautics Commission staff in the Safety and Education Division on April 1, 1966. Dorothy's position will entail a variety of duties, however, primarily she will function as secretary to Safety and Education Officer, Jack Wilson.



Dorothy Cordial

Dorothy, a native of Montana, was born and raised in Anaconda. She attended Woodbury College in Los Angeles and recently took a stenographic refresher course at the Capitol School of Business in Helena.

The Cordials returned to Montana from California two years ago during which time Dorothy has been kept busy raising her family of five children. She enjoys her favorite hobbies of golf, skiing, bowling and swimming.

Husband Jim is the Industrial Relations Supervisor for Kaiser Permanente Cement Co. in Montana City. The Cordials reside at 811 Power in Helena.

### **INQUIRY FROM IDAHO:** ARE YOU INTERESTED IN A SCENIC SUMMER VACATION SPOT?

"The Idaho Department of Aeronautics is offering special services to all flying groups or individuals who are looking for scenic and recreational places to vacation this sum-

"In addition to offering recommendations to individual aircraft inquiries, Idaho will offer assistance and help plan a selection of packaged, all-expense tours" for flying groups of three to five aircraft or more.

"If you are seeking a flying vacation in one of the most scenic, untouched states in the nation—if you would like to vacation on airports scenically located and equipped with camping facilities for flyers onlyif you would like to get your family out where they can hike and climb mountains not overcrowded by people-send your inquiries to: Idaho Department of Aeronautics, 3103 Airport Way, Boise, Idaho."

# BILLINGS W/X CHIEF **GUMPF RETIRES** WOERNER APPOINTED

Mr. Ralph E. Gumpf, Meterologist in Charge, BWAS, Billings for the past 13 years retired on December 31, 1965.

Ralph entered Weather Bureau service in Montgomery, Alabama in 1926 shortly after being discharged from the Military Service-transferred to Washington D. C. in 1927promoted to District Forecaster in Chicago in 1939. In 1942 Ralph was transferred to Billings as Aviation Forecaster and received his promotion to Meteorologist in Charge in 1953.

Ralph is a member of the American Meteorological Society and enjoys fishing, hunting, traveling and stamp collecting.

The Gumps have two married sons and reside at 633 Parkhill Drive, in Billings.

Mr. Norris E. Woerner has been named Meterologist in Charge of the Billings Station. Mr. Woerner has been 19 years with the U.S. Weather Bureau and has served as aviation weather forecaster in Montana since 1955. He was promoted to his new position from the Great Falls Station.

Norris is a native of Michiganattended Adrian College and Tri-State College in Michigan and the California Institute of Technology. He attended a special training course at the University of Michigan in 1965.

Ralph is a member of the American Meteorological Society. At the present time Ralph's wife, Mary, is teaching at the State School for the Deaf and Blind in Great Falls; daughter Jo Ann is a senior in nursing at Montana State and son John is a senior at the Russell High in Great Falls.

FOR SALE: 1959 Cessna 172—Immaculate—Mark 2 omnigator and low freq. receiver—full panel—670 total time. Annualled till February 1/'67. Price: \$6,800. Trade down for 170 Stinson; 140; 120 or Ercoupe. Contact Dr. J. L. Cromwell, Box 420, Livingston, Montana.

FOR SALE: 1953 PA 22 Tripacer—full panel—200 SMOH—fabric good—clean—always hangared. Price: \$3,750. Contact: C. W. Fowler, 1731 Fifth, Helena.

FOR SALE: 1940 Piper J3C-65—248 hrs. SMOH—complete recover with razor back in 1965—Annualled in March, 1966—Refinished prop at annual—1436 hrs. TT—Contact: Peggy Ralston, Culbertson or call 787-5258.

FOR SALE: 1956 Cessna 182—340 hrs. SMOH
—recent annual—Mark IV omni-ADF/12—skirts
—low gear—full paint—excellent ship. Price:
\$7,500. Contact: Byron Bayers, Twin Bridges.



May 2, Lewistown—Vo-Ag Flying Classroom, Fergus County High.

May 7, Wenatchee, Washington— Pangborn Field - Apple Blossom Festival - Fly-In. Big Parade starts at 10:00 A.M. Transportation to and from City.

May 9, Columbus—Vo-Ag Flying Classroom, Columbus High School.

May 10, Broadus—Vo-Ag Flying Classroom, Broadus High School.

May 11, Helena—Montana Aeronautics Commission's monthly meet-

May 14-15, Ennis—Overnight Fly-In of Flying Farmers and Ranchers. MFF&R president Clay Greening has extended a special invitation to the Flying Physicians and members of the Billings Hangar of the MPA to participate. For reservations contact Otis Crooker, Sportsman Lodge.

May 15, Jordan—Garfield County Airport Dedication. Free Breakfast will be served from 8:00 A.M. to 11:00 A.M.

Governor Tim Babcock is expected to be the featured speaker for the dedication ceremonies at 11:00 A.M.

May 20-22, Bakersfield, California
—Shaffer Airport. International
Championship Stock Plane Races.
Accompanying air show and display
—Awards banquet and dance. For
further information write: Bakersfield "100", P. O. Box 5656, Bakersfield, California. 93308.

May 27-30, Los Angeles County, California. Fox Field, Lancaster— The Second Annual Los Angeles National Air Races.

May 30, Indianapolis, Indiana, "Race Day." Pilots planning to attend may procure Special V.F.R. Air Traffic Procedures for Weir Cook Airport from the Montana Aeronautics Commission.

June 4, Culbertson—Airport Dedication.

June 5, Glasgow—International Designation Dedication—U.S. Customs.

June 9, West Yellowstone

Western Airlines resumes regular
service at West Yellowstone Airport.

June 12-16, Seattle, Washington
—Olympia Hotel, American Association of Airport Executives Annual
meeting.

June 13, Billings—Eastern Montana College, Teachers Workshop will commence.

**June 15, Havre**—Northern Montana College, Teachers Workshop will commence.

**June 20, Missoula**—University of Montana, Teacher Workshop will commence.

**June 20, Billings**—Eastern Montana College, Teachers Workshop will commence.

**June 23, 24, Wichita, Kansas**— National Aviation Education Council meeting.

June 24—Deadline for Al Ward Flying Scholarship contest—Winning State Entries to be received at International Headquarters in Wichita, Kansas.

June 26, Schafer Meadows— Camp Ground Dedication.

June 26, Poplar—Airport Dedication. 7:00 - 10:00 A.M. Free pilots Fly-In Breakfast; 11:00 A.M. Dedication Ceremonies. All pilots are urged to attend this dedication and remain to attend the Wild West Days Rodeo on Sunday Afternoon.

July 4, Plentywood—Sherwood Hangar, Fly-In Breakfast. Free to all pilots and passengers. (Rain date July 10.)

**July 4, Polson**—Flying Farmers Fly-In Pot Luck at Baldwin's Ranch, Finley Point.

July 24, Lincoln—Airport Dedication.

**July 30 - August 5**—Louisville, Kentucky, International Flying Farmers Convention.

August 6, (Rain date August 7)— Ladies 99's "Fun Race," starting point: Glasgow—Ending at Lewistown.



March, 1966

	Total Operations	Instrument Operations
Billings	11,532	899
Great Falls	8,354	622
Missoula	6,504	256
Helena	3,752	137

# GREAT FALLS LOW FREQ DECOMMISSIONED

On March 4, 1966, the Great Falls tower low frequency transmitter on **278kc**, was decommissioned.

# FINAL DEADLINE FOR PILOT REGISTRATION

Pilot Registration commences in January of each year and the final deadline is April 1st. State regulations for pilot registration state that all pilots operating aircraft in Montana register their FAA airman certificate annually, on or before April 1, with the Office of the Montana Aeronautics Commission. Registration will be on an approved form provided for this purpose. The registration fee is \$1.00. A registration certificate will be issued as evidence of compliance. Pilot registration is required by student pilots, private, commercial and airline transport pilots who are not engaged in scheduled interstate airline opera-

It is further required that all pilots operating aircraft for the distribution of chemicals, seeds or bait be registered annually at the office of the Montana Aeronautics Commission. Registration will be made on the reverse side of the registration form and the registration certificate will be stamped accordingly by the Commission.

Pilots who are registering for the first time will receive a copy of the Airport Directory while pilots reregistering will receive the latest revisions for their directories.

The registration monies collected are deposited in the Air Search and Rescue fund and used to defray fuel and oil costs during searches.

Registration information is used by the Commission to plan and better serve aviation interests in Montana and is the basis of our mailing list for the monthly newsletter. The mailing list will be revised as of May 15, non-registrants will be deleted as of that date.

The list of non-registrants will be submitted to the Safety and Education Officer on May 30th!!

### **STATISTICS**

(Montana Aircraft Accidents)

-		
Γ	61/37	
1	65/22	
1	11/4	
	8/0	

		Accidents Total	Fatalities
1964	Total	61	37
1965	Total	. 65	22
1965 a	s of this date	e 11	4
1966 a	s of this date	e 8	0

### FAA INSPECTOR'S CORNER



Spring is upon us, with it's welcome nice flying weather. We can "go flying" now without shoveling snow, chipping ice away from the hangar doors, preheating engines, and wearing fur parkas. Flying gets to be fun again, and if the little bird doesn't snap right off the ground and climb like a rocket, who's to care? In fact, we really don't notice it too much because the weather warms up gradually instead of all at once, and we get used to the slowlydiminishing performance like we do to a lot of other gradual changes. Maybe if the temperature would jump from zero to 95° in the shade overnight the drop in performance would impress itself on our memories in a lasting fashion.

However, nature just doesn't work that way, even in Montana. So let's tax our memories a bit and remember just a few weeks ago when the temperature was 3° below zero, and the density altitude here at Helena was right at sea level. Now it's reaching 70 and the density altitude is 5600', and the airplane that cleared a 50' obstacle in 1200' then will use 2200' to do the same job now. The rate of climb has been cut in half already; these figures will multiply themselves again in the coming months.

Getting into the back country to fish a little, or just get away from it all for awhile is sure enticing, but it's easy to stub your toe; a few simple precautions will usually keep a pilot out of trouble. Here again, do it like the pros do. If you haven't been on the strip, or if you haven't been there since last summer, do a little checking to find out what winter has done to it. Do some figuring on your expected departure weight (here's one place it doesn't hurt to lie a little about the size of your fish) and temperature before you start out, not when you're on the strip and reluctant to leave anything behind. When you go in, size it up carefully from the air before you "shoot for record." Almost every pilot instinctively picks a landing spot when going into a bush airport, but let's go this one better

and pick a hard-and-fast "refusal point." Then, if you're not on the ground when you pass that dead tree or those tracks beside the runway or whatever, it's an automatic go-around and you won't waste any time thinking you can still make it when you don't have any time to waste. You won't find yourself in the position of being unable to stop before reaching the end, and unable to go around because you can't clear the trees. If it's a "one-way" strip with no go around possible after getting below the last two or three hundred feet on final, it takes some good planning and sharp flying to set the approach up right—the correct airspeed and flight path are mandatory.

All this goes double for off-airport operation. Many of us have landed in more cow-pastures and hay meadows than we have airports without trouble, but we've probably refused as many as we've landed in. Sizing up the field from the air is doubly important-set up the airplane at reduced speed, well trimmed and stabilized so you can devote most of your attention to the field, and fly past at about three hundred feet or so. If it takes an extra look, drop down to safe obstacle clearance altitude and look it over again. These few minutes are well spent. And when you go out, use all the available take-off area! Seems unbelievable, but we still have accidents because someone left a batch of takeoff area behind him and went through a fence!

Before we close, a word of congratulations to you Montana birdmen—the accident record has been very good this past winter. Keep up the good work and we'll have an

equally fine summer.

## AL HARDY DESIGNATED FAA FLIGHT EXAMINER

On March 21st, Alfred E. Hardy, Plentywood Flight Operator and airport manager, was designated a Federal Aviation Agency Pilot Flight Examiner by Fritz Lueneburg, Supervising Inspector for the FAA's GADO No. 1 in Billings.

Resident of Sheridan County for the past 15 years, Al has been operating at the Sherwood Airport for the past three and one-half years.

Al has over 4000 hours of flight time and holds a Commercial license with Multi-Engine; Instrument: Flight Instructor; Instrument Instructor and

Helicopter Ratings.

Al instructed on the AOPA 360° Course held in Billings, Montana in September of 1963. He attended the Second Montana Flight Instructors Course in 1962 and participated in the 1964 and 1966 courses as a Flight Line Instructor.



New Flight Examiner, Al Hardy

Al is a member of the Montana Pilots Association—the Montana Aviation Trades Association and the AOPA.

The Hardy's and their three daughters have their home at the Sherwood Airport where wife Monica pleasantly and efficiently handles the operation whenever Al is busy spraying, flying charter or students.

# J. POLING NAMED CUSTOMS INSPECTOR FOR NEW STATION AT GLASGOW

John Poling, Wokal Flying Service employee, was named Customs Inspector for the Glasgow Airport. Effective in March, all types of aircraft entering the United States from Canada may clear customs at the Glasgow Municipal Airport which will be the fourth Internationally Designated Airport in Montana, the other three being Great Falls, Havre, and Cut Bank.

No charge will be made for clearing customs from 8:00 A.M. to 5:00 P.M. Monday through Saturdays. A schedule of charges is available for clearance on Sunday, Holidays and off-hours during the week.

Formal dedication of the International Designation will be held in Glasgow on June 5th, 1966.



MAMA Officers: (Left to right) Director Hugh Kelleher, Helena; Secretary-Treasurer Art Weidiman, Lewistown; Vice-President Art Korn, Butte; Ex-officio Director, James H. Monger, Helena, (Seated) President Ruben Coy of Missoula.



(Lt. to rt.) Speaker, Vern Carlson of Frontier Airlines, Denver; Host-Airport Manager Robert Michael, Billings and banquet speaker Wyman Henry of Beech Aircraft Corporation, Wichita.

equipment and techniques. Partieipants were Mr. Robert Glasgow, Fire Marshall, Billings; Mr. Jack West, Ansul Chemical Company, Indianapolis and Sgt. Maynard Johnson U.S.A.F., Billings.

A pre-banquet cocktail hour was sponsored by the four airlines operating in Montana—Frontier, Northwest, West Coast and Western. The featured banquet speaker was Mr.

Wyman Henry, Vice President of Marketing, Beech Aircraft Corporation, Wichita, Kansas. Mr. Henry spoke specifically on making a profit through general aviation.

The new officers of the Montana Airport Management Association are as follows: Ruben Coy of Missoula, President; Arthur Korn of Butte, Vice President; Art Weidiman of Lewistown, Secretary-Treasurer. Directors: Ed Swetish, Dillon; Sig Ugrin, Miles City; Hugh Kelleher, Helena; exofficio director, James H. Monger of Helena and the executive secretary-treasurer, Robert Michael of Billings. The group agreed that the Billings meeting was one of the finest airport management meetings ever held in Montana. The good attendance and audience participation further attested to the fact that the organization is coming into its own in Montana.

The Executive Committee will be meeting in the near future to decide the location of the next annual meeting.

### CONGRATULATIONS



# RECENTLY TO MONTANA FLYERS

#### **STUDENTS**

Walker, Robert O.—Helena Love, James E.—Swan Lake Newby, Alison—Belgrade Newton, Roy E.—Missoula Frary, Burrell T.—Eagle River, Alaska Weydahl, Haakon M.—Kalispell Savant, Billy-Great Falls Babbs, Donald M.—Great Falls Sheppard, Ronald L.—Great Falls Parker, Charles S.—Great Falls Sackett, John B.—Great Falls Hillstrand, Thomas C.—Great Falls Bosse, Gerard J.—Great Falls Goldhahn, Harold H. Jr.—Geraldine Spilliman, Richard L.—Cut Bank Ostrom, Norma A.—Kalispell Hess, Mahlon—Great Falls Toavs, Willard A.—Larslan Fenger, Joel H.—Lothair Kelsey, Terry D.—Bozeman Roberts, Barry A.—Hamilton Little, Thomas W.—Kalispell Ledeau, Gary A.—Missoula Shell, Jack R.—Gallatin Gateway Shell, Larry G.—Gallatin Gateway Turley, Nan M.—Three Forks Kidd, Mary Clara—Great Falls Walden, JoAnn—Great Falls Mackay, Larry—Helena Hensley, Collyn S.—Havre Phelps, Harold E.—Bozeman Pace, James D.—Bozeman

Sands, Myrtle F.—Kalispell Zody, James G.—Glendive Smith, Barry W.—Chinook Walter, James S.—Kalispell Baldwin, Roger G.—Kalispell Lindstrom, Arthur H., Jr.-Missoula Rogers, Julian W., Jr.—Bozeman Mitchell, Tom W.-Sherbonn, Mass. Ogren, Erik R.-Lockport, III. Wallace, William W.—Hall Hawkins, Thomas T.-Missoula Crookshanks, Charles E.—Great Falls Crookshanks, Marjorie M .- Great Falls Nilsen, Lou R.-Missoula Gale, Robert D.-Missoula Stirling, Donald F.—Shelby Borchers, Louis F.-Polson Wahl, Richard J.—Cut Bank Brooks, Edward E.—Cut Bank Douglas, John D.—Bonner Mitchell, George L.—Missoula Athearn, James L.-West Glacier Ferguson, William R.—Hamilton Terpstra, James E.—Bozeman Carter, George L.-Whitefish Fisher, Brent K.-Butte Snider, Roger A.—Hogeland MacNab, Duncan S.—Bozeman Althauser, David C.—Eureka Obie, Edgar L.—Chinook Davies, Jack W.—Chinook Johnson, Billy T.—Hardin Larsen, Hans J.—Dagmar Deichle, Andrew J.—Billings Womack, William L.—Pullman, Wash. Blair, George T.-Bozeman Randolph, Raymond W.-Wolf Point Markle, Dick J.—Glasgow Meissel, Helmuth F.-Culbertson Dugan, Donald W.—Billings Bonine, Richard C .- Miles City Kramer, Brother M.—Ashland Knudson, John V.—Glasgow Foos, Elmer E.—Brockton Thiel, Denis W., Sr.—Great Falls Williams, Fred T.—Livingston Jordan, Edwin W. Jr.—Wilsall Harris, Don C .- Billings Larson, Johannes E.—Plentywood Brittain, Jared J.—Billings Musgrave, Richard L.—Billings Almond, James R.—Hysham Schaak, Robert D.—Billings Hawkins, George T.—Brigham City, Brickman, Charles E.—Billings Osen, Tommy C .- Billings Cyree, Elmer C .- Opheim

Crandall, Manford D.—Opheim Hanaway, Francis J.—Glasgow

Magnus, Donald I., Jr.—Glasgow

McGhan, Marvin J.—Glasgow Patrick, Larry D.—Rudyard

Hines, James L.—Glasgow

Schye, Ted E.—Glasgow

Zerbe, Paul—Lustre Burt, Lee C.—Billings

### **PRIVATES**

Ulyatt, John R.-Missoula Milstead, John L.—Hamilton Hanrahan, Dean R.-Helena Grinde, James A.—Shelby Murray, Michael C.—Savage Fulkerson, David G.—Plentywood Buckley, Richard H.—Bozeman Larson, Norman H., Jr.—Butte Boyd, Charles W.—Shelby Serquina, John-Miles City Smith, Benjamin D.—Marana, Arizona Wryn, Frank B.-Missoula Schuette, Robert D.-Missoula Maronick, William J.—Great Falls Hensler, Eugene C.—Kalispell Olson, Thomas M.—Baker Smalley, Lawrence H.—Powell, Wyo. Mahowald, Michael A.-Minneapolis, Minnesota Neff, Taylor S.—Lewistown Deville, Richard F.—Bearcreek Connors, John F.—Butte Lindley, James M.—Billings Scheeler, Arnold R.—Silesia Genereaux, Eugene P.-Big Horn, Wyoming Newton, Harold L.—Billings Crowder, David L.—Missoula Koehane, Neil W.—Billings Hall, Raymond C.—Worland, Wyo. Ten Brook, Joseph M.—Billings Baker, Coy L.-Powell, Wyo. Wandler, Edward A.—Billings Thompson, J. C.—Billings Downs, William A.-Molt Dick, Marvin—Frazer Beardsley, Albert R.—Glasgow Sizemore, Robert H.—Glasgow Carpenter, Donald N.—Miles City Carter, Curtis D.-Miles City Pellett, William R.-Miles City Giebel, Edmund J.-Miles City

# ADVANCED AND SPECIALIZED Commercial

Ledbetter, Beverly C.—Havre
Johnston, Andrew J.—Philadelphia,
Pennsylvania
Habel, Raymond J.—Dutton
Strauss, Donald V.—Butte
Taylor, Jeron—Glendive
Berner, Charles H.—Sidney
Coull, Glen W.—Gimli, Manitoba
Crowe, Gordon C.—Gimli, Manitoba
Bauer, Jack L.—Billings
Rubin, Harold A.—Billings
Rodenberg, Harry J.—Wolf Point
Ellis, Richard I.—Miles City

### Multi Engine

Hanson, James L.—Riverton, Wyo. Gerard, Sumner—Ennis

#### Instrument

Stevenson, Mary L.—Missoula
Mock, Robert C.—Missoula
Stohr, Penn R.—Missoula
Strauss, Donald V.—Butte
Woltermann, Gary G.—Columbus
Udelhoven, Larry C.—Winifred
Berner, Charles H.—Sidney
Crowe, Gordon C.—Gimli, Manitoba
Coull, Glen W.—Gimli, Manitoba
Martin, Gary J.—Malta

### Flight Instructors

Wilson, Jack—Helena Bartlett, George E.—Billings Lynch, John D.—Billings Sonju, Norman M.—Shelby

Flight Instructor Instrument Stevenson, Mary L.—Missoula Thomas, Richard C.—Billings

Re-Issue FIA + FII Ratings Keilman, Gail J.—Miles City Oglesby, Steve R.—Peerless Hardy, Alfred E.—Plentywood

Instrument Ground Instructor Skovgaard, O. Ray—Billings Larson, Marvin R.—Bynum

Rotorcraft/Helicopter

Wilson, Raymond L.—Cut Bank Baze, Charles B.—Missoula Chambers, William R.—Cut Bank

Type & Special Purpose Ratings
Erickson, Kenneth A.—Newcastle,
Wyoming

## MONTANA AIRCRAFT OWNERS

It is necessary under the SARDA plan of the Civil Defense that the State Aeronautics Department maintain a roster of the FAA registered aircraft owners of civil aircraft within the State of Montana.

The registration of aircraft in the State of Montana is being done on a voluntary, nocost basis, by your State Aeronautics Commission. The forms are available from General Aviation Flight Operators and the Montana Aeronautics Commission.

IF YOU OWN AN AIRCRAFT
—PLEASE, OBTAIN A FORM—
COMPLETE AND SEND IN TODAY!

# FEDERAL **AVIATION AGENCY** INSTRUMENT PILOT EXAM-O-GRAM NO. 9

### IMPORTANT AERONAUTICAL **KNOWLEDGE AREAS** COMMONLY MISUNDERSTOOD

Studies of Instrument Pilot Written Examination results show that applicants have considerable difficulty in certain critical areas of aeronautical knowledge. Concentrated study in these areas will promote safety and competency, and will aid greatly in preparting for written examinations.

The following list identifies these problem areas and indicates appropriate references. For a complete study outline, applicants should refer to the Instrument Pilot Examination Guide.

### INTERPRETATION OF FLIGHT INSTRUMENTS

(Private Pilot's Handbook)

- 1. Altitude terms (pressure, density, indicated, etc.)
- 2. Effect of changes in temperatures and pressure on altimeter indications.
- 3. Interpretation of needle and ball (turn and bank).
- 4. Relationship of TAS and angle of bank to rate of turn.

### AIDS TO AIR NAVIGATION-**OPERATING CHARACTERISTICS** AND LIMITATIONS

(Airman's Information Manual and Private Pilot's Handbook)

- 1. Ranges—VOR/VORTAC
- 2. Primary Radar—ASR, ARSR, and PAR.

### **OPERATIONAL PROCEDURES** AND TECHNIQUES FOR INSTRUMENT FLIGHT

(Airman's Information Manual)

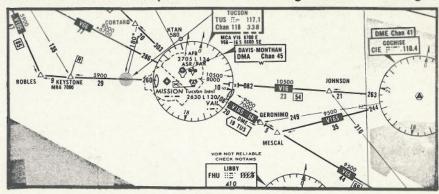
- 1. Radar (Section I)
- 2. Flight Plans (Section II)
- 3. VFR Operations on an IFR Flight Plan (Section II)
  - 4. Clearance (Section II)
  - 5. Holding (Section II)
  - 6. Communications (Section II).
- 7. Compulsory Reports (Section 11).

### **ENROUTE** NAVIGATION PROCEDURES

(Numerous references)

- 1. Determining position from instrument indications—ADF/VOR.
- 2. Determining relative bearings.

### A Portion of Chart L-4 is Reproduced for Answering Questions 6 through 10



### TRY THIS TEST

- 1. The MEA ensures acceptable navigational signals for accurate navigation and .....
- 2. If the MOCA does not ensure reliable navigational signal coverage between fixes, a higher altitude is designated as the .....
- 3. MRAs are designated at certain intersections where aircraft position cannot be determined accurately at the .....
- 4. The lowest altitude for crossing a radio fix beyond which a higher minimum applies (if no minimum crossing altitude is specified is the ......
- 5. Different MEAs for opposite directions of flight along an airway are sometimes specified due to ......

-----

- 6. A flight on V105 (west of TUS VORTAC) may not be able to determine position over KEYSTONE at an altitude below .....
- 7. An enroute flight approaching TUS and proceeding east on V16 must cross the TUS VORTAC at or above .....
- 8. The MOCA on V66 west northwest of TUS, is .....
- 9. A southeastbound flight on V66 must cross MESCAL at or above .....
- 10. A northwestbound flight on this airway may cross GERONIMO at a minimum altitude of .....
- 11. Acceptable navigational signal coverage at the MOCA is ensured for a distance from the VOR
- 12. For flight outside controlled airspace, the responsibility for determining the minimum IFR altitude rests with the .....
- 13. In what areas may ATC assign the MOCA to an IFR flight? .... .....

- 14. When or why would ATC assign the MOCA? .....
- 15. The minimum IFR altitude for "VFR Conditions on TOP" operation, except in an emergency, is the ......

### ------ANSWERS TO QUESTIONS:

- 1. obstruction clearance require-
  - 2. MEA.
  - 3. MEA
- 4. MEA at which the fix is approached.
  - 5. rising or lowering terrain.
  - 6. 7000 feet.
  - 7. 8700 feet.
  - 8. 6700 feet.
  - 9. 7000 feet.
  - 10. 9500 feet.
  - 11. 22 NMI
- 12. pilot.13. Only within 22 nmi. of a VOR.
- 14. For traffic control purposes, or at pilot's request.
- 15. MEA, or published MOCA within 22 nmi. of a VOR.

### **BILLINGS TOWER SETS 3 RECORDS**

The Federal Aviation Agency reports that the Billings Tower set the following new records for the First Quarter of 1966:

February total of 10,926 operations is an all time high for February aircraft movements.

March total of 11,532 operations is an all-time high for March aircraft movements.

The 1st Quarter-January 1 through March 31st had a total of 30,862 operations—for this period, another all-time high.

One other indication of increased aviation activity in the Billings area was noted by the Commercial Airline Passenger increase of 36,737 in 4 years. 86,363 embarked from Logan Field during 1965—compared with 49,626 in 1961.

# A NEW TWIST TO A BUSMAN'S HOLIDAY

David Gauthier, Northwest Orient Airlines First Officer based in Seattle/Tacoma, is an avid fan of World War I vintage aircraft. 1964, Gauthier purchased a Fokker Triplane built by teenagers, John and Mark Sorrell of Olympia, Washington. The plane is a three-quarterscale replica of the World War I German fighter plane—the top wing has a spread of 19 ft. with the middle and lower wings shorter. With steel tubing fuselage covered with a dacron fabric, the replica is faithful to the details of the original Fokker except for two or three items: Dacron hadn't been developed 50 years ago and instead of the rotary engine the replica is powered with a 125 hp modern Lycoming.

Honda motorcycle wheels are used in the landing gear, which is not too far from the original, they are correct for scale and like the original wire wheels, the exposed

spokes are covered with fabric for streamlining.



D. Gauthier and his Iron Cross-marked aircraft are dwarfed as he taxies alongside one of the huge Boeing 707-320C fan jets.

The single cockpit aircraft cruises at about 105 mph compared with the 115 for the original in level flight.

Gauthier has arranged to have his plane's license number included

in the authentic German Serial number which was carried on Baron Manfred Von Richthofen's, (German World War I fighter pilot) Fok Dr N107 17.

Gauthier has flown as far from home in his Fokker as Nevada and California. Flights which require necessary intermediate stops—stops which are completely foreign to his work-a-day world of flying non stop between Tokyo or New York when he pilots the Boeing 707-320C fan jet.

FOR SALE: 1946 Cessna 120—85 h.p. engine— Mark IV radio—good tires—wheel extensions real good fabric—In excellent condition throughout. Price: \$2,200. Contact: Rev. Charles Mears, Medicine Lake, Montana. Phone 789-2421.

FOR SALE: 1948 Cessna 120—Ceconite fabric—3 radios—fully IFR equipped—metal prop—eyebrow panel lighting—landing lights and rotating beacon—many other extras—Price: \$3,000. Will trade. Contact: Wendel R. New, P. O. Box 537, Scobey, Montana.

FOR SALE: 1943 — D-17-S — Supercharged stagger-wing Beech—450 h.p. Pratt & Whitney, King KX-100 and Motorola 12E, full panel, fabric high in green. 5 passenger. Color, gray and yellow. A real performing airplane which has had excellent care. Call: Fred Naegele, 442-4380 or 442-4061, Helena, Montana.

#### MEMBER

### NATIONAL ASSOCIATION OF STATE AVIATION OFFICIALS

PURPOSE:—"To foster aviation as an industry, as a mode of transportation for persons and property and as an arm of the national defense; to join with the Federal Government and other groups in research, development, and advancement of aviation; to develop uniform laws and regulations; and to otherwise encourage co-operation and mutual aid among the several states."

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